the abdomen wetted, and I placed them on some blotting-paper until they were dry. On returning them to the water, two remained underneath a floating piece of cork, and the hair being now dry retained the pellicle of air which is ordinarily observed. One of the two came out of the water, attached the cork to the glass, and wove a web against the latter, against which it rested about a quarter of an inch abore the surface of the water After remaining there about two days, it resumed its aquatic habits, and like all the others formed its winter habitation. I have now no fewer than ten which have formed their cells, in which they are perfectly at rest, and evidently hibernating.

The general habits of this interesting animal are well described by De Lignac, De Geer, Walckeuaer, and others, and an excellent résumé of the whole observations is given by the latter anthor, in his 'Histoire Naturelle des Insectes Aptères.'

Catalogue of the Dipterous Insects collected at Singapore and Malacea by Mr. A. R. Wallace, with Descriptions of New Species. By Fraxcis Walker, Esq., F.L.S.

> [Read January 15th, 1856.]

Mr. A. R. Wallace, so well known for his natural-history researches in the valley of the Amazons, and for the extensive and valuable collections sent home by him from that portion of South America, has now turned his attention to the eastern world, and is actively inrestigating the natural history of the East Indian Islands, after haring spent some months on the Malay Peninsula. A large portion of Mr. Wallace's entomological collections pass into my hands, and being desirous of making his labours scientifically useful, I have requested Mr. F. Walker, who has such an intimate knowledge of the insects belonging to the order Diptera, to draw up the following catalogne of the dipterons insects discorered by Mr. Wallace at Singapore and Malacca. My object in so doing is to establish a kind of starting-point for tracing hereafter, when all Mr. Wallace's collections shall have come to hand, the geographical distribution of the Diptera in the rery interesting portion of the globe which Mr. Wallace is now investigating with such indefatigable zeal. Singapore and Malacea, at the extremity of the Malay Peninsula, are well placed for carrying out the purpose I have in riew, being in comexion northwards through the

Burman Empire with the expand continent of Asia, and southwards in close approximation with that archipelago of splendid islands which run in a chain to the north coast of Australia, and send off a branch northwards throngh the Philippine Islands to the coast of China, touching there again the mainland of Asia. The present catalogne will be followed very shortly by one detailing the species of Diptera discovered in Borneo, the materials for which are now nearly all in this country, and other catalogues will follow until Mr. Wallace's discoveries in the Diptera are exhausted. That Mr. Wallace will be able to visit all the islands of the Indian Archipelago is not to be expected; but still, his plan of exploring those which have been but little examined in a natural-history point of view, will open up a large amount of information, which, when combined with the labours of other maturalists who have been working in the same districts, will give sufficient facts for laying down some laws on the geographical distribution of the insects belonging to the Order which forms the subject of the following catalogue. The specimens collected at Singapore and Malacta were taken during the six months commencing with May and teriminating with October. Where the altitude of the locality abore the level of the sea of any species is known, this will be found noted in the proper place. Figures will be given to illustrate new genera or any very remarkable species.

## Whliay Wilson Saunders.

14th January, 1856.

## Fam. BiblON1D,E, Haliday.

## Gein. Plecri, Hoffmensegy.

1. Plecta dorsalis, n. s., mas et fem. Atra, thorace rufo, alis nigricaintibus.
Male and female. Deep black. Thorax bright pale red. Wings blackish. Length of the body $2 \frac{1}{2}-3 \frac{1}{2}$ lines; of the wings $7-8$ lines.
The totally red thorax of this species distinguishes it from P. fulvicollis, Wied., and from $P$. ignicollis, Walk.

Singapore and Mount Ophir.

## Fam. CULICDD.E, Haliday.

Gen. Culex, Linn.
2. Culex splendens, Wied. Auss. Zweifl. i. 3. 3.

Singapore. Inhabits also Java.
3. Culex fuscanus, Wied. Auss. Zeveiff. i. 6. 9.

Malacea. Inhabits also IIindostum.
4. Culex annulipes, n. s., foem. Obscurè fuscus, thoracis abdominisque lateribus albo-punctatis, pedibus albo-cinctis, alis sublimpidis venis fuseociliatis.
Female. Dark brown. Sides of the thorax and of the abdomen with minute white dots. Legs with numerous white bands. Wings nearly limpid; reins brown, ciliated. Length of the body $2 \frac{1}{2}$ lines; of the wings 4 lines.
Singapore. (Jungle.)

## Fam. TIPULID.E.

## Gen. Liminobia, Meigen.

## Div. I. Meig. Zueifl. i. 131. pl. 5. f. 5.

5. Limnobia leucoteles, n. s., mas. Atra, alis nigricantibus, maculâ discali limpidâ, margine postico subcincreo, apice albo.
Male. Deep black. Wings blackish, with a discal limpid spot; posterior border slightly greyish for rather more than half the length from the base; tips white. Length of the body 6 lines; of the wings 12 lines.

## Singapore.

6. Limnobia plecioides, n. s., fœm. Atra, thorace pallidè rufo, alis nigrícantibus.
Female. Deep black. Thorax pale red. Wings blackish. Length of the body 7 lines; of the wings 12 lines.
Singapore.

> Div. L. Meiy. Zueifl. i. 132. pl. 5. f. 4.

The structure of the wing-reins in the abore division is almost, but not quite, identical with that of the following species.
7. Limmobia diciros, n. s., feem. Atra, antennis ferrugineis basi apiceque nigris, abdomine luteo, basi fasciâque latissimâ postieâ nigris, pedibus testaceis, femoribus tibiisque apice tarsisque nigris, alis fuscescentibus costâ testaceî.
Female. Deep black. Antennæ ferruginons, black at the base and at the tips. Abdomen luteons, black at the base and with a very broad black band beyond the middle. Legs testaccous ; tarsi and tips of the femora and of the tibie black. Wings brownish, testaceous at the base and along the costa. Length of the body 9 lines; of the wings 16 lines.
Mount Ophir.

## Gen. Crenoriors, Fabr.

8. Ctenophora chrisophila, n. s., fem. Lutea, abdominis apice nigro, pedibus pallidè lutcis, femoribus apice tibiis tarsisque nigris, alis flavescentibus apice nigris margine postico interruptè nigricante.
Female. Bright luteous. Abdomen black towards the tip. Legs pale luteous; tibie, tarsi, and tips of the femora black. Wings yellowish, black towards the tips, irregularly and interruptedly blackish along the posterior border. Length of the body 8 lines; of the wings 16 lines.
Singapore.

## Fam. STRATIOMíde, Haliday.

## Gen. Ptilocera, Wied.

9. Ptilocera quadridentata, Fabr. Syst. Antl. S6. 33. (Strationys.)

Malacea and Singapore. Inlabits also Java, Sumatra, and the Philippine Islands.

## Gen. Strationits, Geoffroy.

10. Stratiomys Lutatius, Walk. Cat. Dipt. pt. 3. 532.

Malacca.
Gen. Clitellalia, Meigen.
1.1. Clitellaria bivittata, Fabr. Syst. Aull. 79. 5. (Stratiomys.)

Singapore. Inhabits also Java and Sumatra.
12. Clitellaria varia, Walk. Cat. Dipt. 2nd Ser. pt. 1. 63.

Malacea. Inhabits also Java.
13. Clitellaria flaviceps, $\mathrm{n} . \mathrm{s}$., fœm. Nigra, eapite flavo, thorace cinereo trivittato, scutello bispinoso, abdomine purpureo-cyanco, alis cinereis apud costam nigricantibus.
Femate. Black. Head pale ycllow. Antennæ a little shorter than the thorax. Thorax a little narrower in front, with three grey stripes. Scutellum with two stout spines. Abdomen purplish blue; disk beneath hoary. Wing ${ }^{3}$ dark grey, blackish along the costa; veins black. Haltcres whitish. $T^{\text {Tor. }} \beta$. Smaller. Spines of the seutellum and tarsi whitish, with black tips. Length of the body $2 \frac{1}{2}-3 \frac{1}{2}$ lines; of the wings $5-7$ lines.
Singapore.

## Gen. Ciflogaster, Macquart.

14. Cyclogaster radians, n. s., fom. Nigra, capite nitido, antemnis fulvis aristâ albidâ, thorace cincreo radiis quinque nigris, abdomine subrotundo, tarsis albidis, alis cinercis.
Female. Black, rather broad. Head shining. Antemnæ tawny, with a pubeseent white arista which is as long as the preceding part. Thorax cmereous, with five black rays, three in front and one on each side. Scutellum obconieal, prominent. Abdomen uearly round, cinereous, with threo rows of black spots. Knees and the adjoining part tawny ; tarsi whitisl. Wings limpid; veins testaceous. Halteres whitish. Length of the body 3 lines; of the wings 5 lincs.
Singapore.

## Gen. Phyllopiora, Macquart.

15. Phillophora angusta, n. s., mas. Nigra, angusta, sublinearis, antennis setaceis basi fulvis, thorace producto cinereo-bivittato, pedibus testaceis, femoribus postcrioribus suprà piceis, alis cinereis, venis halteribusque fuscis.
Male. Black, narrow, nearly linear. Antenno setaceous, tawny towards the base, a little longer than the head. Thorax elongated, with two cinereous stripes. Scutellum with four very minute spines. Abdomen hardly broader
and not longer than the thorax. Legs testaceous; pusterior femora piceous above. Wings cinereous; veins and halteres brown. Length of the body $-\frac{1}{2}$ lines; of the wings $4 \frac{1}{2}$ lines.
Singapore.

Gen. Eedamea, Wied.

16. Eudmeta marginata, Fabr. Syst. Antl. 63. 3. (Hermetia.)

Singapore. Inlabits also Java, Sumatra, and Hindostan.

> Gen. Massicyta, n. g. (Plate 1. fiy. 1.)

Corpus longinsculum, sat angu:tum. Caput transrersum, breve, thorace rix latius. Antennce graciles, thorace paullò breviores; articulus $1^{1 \text { ns }}$ linearis ; $2^{\mathrm{us}}$ longi-fusiformis, $1^{0}$ vix longior; $3^{\mathrm{us}}$ acmminatus, minimus. Thoras longieellipticus. Abdomen obelavatum, subpetiolatum, thorace plus duplo longius. Pedes graciles. Alce elongatre, sat angustre.
Body rather long and narrow. Head transrerse, short, rery little broader than the thorax. Antemme slender, a little shorter than the thorax; 1st joint linear; 2nd elongate fusiform, very little longer than the 1st; 3rd acuminated, vers minute. Thorax clongate clliptical. Abdomen obclavate, subpetiolated, a little more than twice the length of the thoras. Legs slender. Wings rather long and narrow; mediastinal, subcostal, radial and cubital reins, and median veinlet of the nsual structure; 1st, 2nd and 4th externo-medial veins complete; 3rd abbreviated; subanai joining the anal at some distance from the border ; discal areolet irregularly hexagonal, elongated, narrower towards the tip of the wing.
17. Massicyta bicolor, 11. s., fœm. Nigra, antemis basi testaceis apice albis, pectore seutelloque flavis, illo nigro bimaculato, abdomine testaceo fasciato, pedibus flavis, femoribus anterioribus tibiisque posticis fusco fasciatis, femoribus posticis uigris, alis cincreis, apud costam subluridis.
Female. Black, shining, with testaceous pubescence. Mouth testaceous. Antennæ testaceons towards the base, white at the tips. Pectus and scutellum yellow, the former with a large black spot on each side. Abdomen with testaccous bands. Legs yellow; hind femora black; anterior femora and hind tibix with brown bands. Wings grey, with a slight lurid tinge along the costa ; veins black. Halteres pale ycllow. Length of the body $6-7$ lines: of the wings 10-12 lines.
Singapore.

## Gen. Sargus, Fubr.

18. Sargns longipennis, Wied. Auss. Zweiff. ii. 31. 11.

Malacca, Inhabits also Java.
19. Sargos lumides, n. s., mas. Ferrugineus, capite pectoreque testaceis, antemis fulvis, abdominis segmentis testaceo-fasciatis, apice nigro, pedibus testaceis, tibiis posticis apice nigris, tarsis posticis nigris apice albidis, alis luridis apice fuscis.
Male. Ferruginous. Head and pectus testaccous. Antemne tawny. Abdomen black towards the tip; a testaccous band on the liind border of each
segment. Legs testaceous; hind tibix black towards the tips; hind tarsi black, with whitish tips. Wings lurid, brown towards the tips; veius brown. Halteres testaceous. Length of the body 7 lines; of the wings 14 lines.
Singapore.

## Fam. TABANID发, Leach.

## Gen. Tabanes, Linu.

20. Tabanus univentris, Walk. Cat. Dipt. pt. 1. 151.

The description in the above reference will not well apply to the two following varieties of this species.
lor. 1. Female. Brown. Head testaceous in front and beneath. Thorax with two testaceous stripes. Abdomen ferruginous, tawny beneath and with a dorsal stripe of tawny triangular spots. Legs blackish ; femora and tibiæ partly testaceous. Wings dark grey.-I'ar. 2. Like Var. 1. Abdomen blackish above, with a dorsal stripe of testaceous spots.
Mount Ophir. luhabits also Borneo.
21. Tabanus partitus, n. s., foem. Nigricans, subtùs albidus, antennis fulvis apice nigris, thorace cinerascente cano-quadrivittato, abdomine piceo albidotrivittato, pedibus testaceis, femoribus tibiisque apice tarsisque nigricantibus, alis subcinercis.
Female. Blackish; underside and head behind with whitish tomentum. Antemne dull tawny, black towards the tips; angle of the 3rd joint minute and obtuse. Thorax greyish, with four hoary stripes. Abdomen piceous, with three whitish stripes. Legs testaceous; tarsi and tips of the femora and of the tibie blackish. Wings greyish, stigma and veins black; fore branch of the cubital vein simple, nearly straight. Length of the body 6 lines; of the wings 10 lines.

## Singapore.

Note.-Tr. rubidus, Wied., is very closely allied to the abore species, but may be distinguished from it by the following characters.
T. rubidus. Front with the callus quite entire. Antenne blackish. Middle stripe of the abdomen composed of triangular spots. Wings greyish.
T. partitus. Smaller. Front with the callus almost interrupted. Antennæ pale tawny, with darker tips. Middle stripe of the abdomen entire, parallel. Wings quite limpid.

## Gen. Cimrsors, Meigen.

22. Chrysops dispar, Fabr. Syst. Antl. 112. 5.

Mount Ophir and Malacea. Inhabits also IIindostan and Java.

Fam. ASILTDA, Leach.
Subfam. Dasypogonites, Wall:
Gen. Discocepilala, Macquait.
23. Discocefixala borsalis, 11. s., foom. Nigricans, thorace subgibboso,
lateribus pectoreque testaceis, pedibus posticis longiusculis sat validis, tibïs posticis subarcuatis, alis subcinereis apice obscurioribus.
Female. Blackish. Thorax somewhat gibbous; sides and pectus testaceous. Hind legs rather long and stout; hind tibiæ somewhat curved. Wings greyish, rather darker at the tips; veins black. Length of the body 5 lines; of the wings 12 lines.
Malacca.

## Subfam. Laphrites, Walk. Gen. Laphria, Fabr.

24. Laphria Remwardtï, Wied. Auss. Zweifl. i. 503. 7.

Malacea. Inhabits also Java and Sumatra.
25. Laphria notabilis, n. s., mas et foem. Nigra, capite thoraeisque maculis quatuor transversis lateralibus auratis ant albis, abdominis lateribus albomaculatis, pedibus pallidè flavis aut albis, femoribus tibüsque apice tarsisque nigris, alis fuscis basim versus sublimpidis.
Male and Female. Blaek. Head with pale gilded or white tomentum. Face convex towards the epistoma. Mystax with a few black bristles. Proboscis straight, porrect, linear. Third joint of the antennæ slender, lincar, about twice the length of the 1st and 2nd together. Thorax with two transverse marks on each side of gilded or white tomentum; scutellum, sides of the hind part of the thorax, and spots on the pectus of the same hne. Segments of the abdomen with a white spot and a few black setæ on each side. Legs palc yellow or white, with hairs of the same hue and with a few black setre; coxx, tarsi, and tips of the femora and of the tibiæ black. Wings dark brown, almost himpid fowards the base which is brown. Halteres pale yellow or whitish. Length of the body $7-9$ lines ; of the wings $11-18$ lines. Malacea and Mount Ophir.
26. Laphria Vulcanus, Wied. Auss. Zweifl. i. 514. 25.

Malacea. Inhabits also Java.
27. Laphria alternans, Wied. Auss. Zweifl. i. 511. 20.

Singapore. Inhabits also Jara.
28. Laphria Orcus, n. s., foem. Nigra, nigro-hirsuta, scutello nigro-cyaneo, abdomine pedibusque nigro-pınpurcis, alis nigricantibus arcolarum discis pallidioribus, halteribus albidis.
Female. Black, with black hairs and bristles. Face slightly convex. Mystax with numerous black bristles, extending over the whole surface. Scutellum dark blue. Abdomen and legs dark purple, the latter with whitish hains on the eoxæ. Wings blaekish; disks of several of the areolets much paler; vcins black. Halteres whitish. Length of the body 8 lines; of the wings 14 lines.
Malacca.
29. Laphria aurifacies, Maeq. Dipt. Exot. Suppl. iii. 22. 33. pl. 2. f. 5.

Singapore and Malacca. Inhabits also the Mohuccas.
30. Lapluria elegans, F'alk. Cut. Dipt. 2nd Ser. 551. $126 . ~_{\text {ºn }}$

Mount Ophir: Tnhabits also Hinclostan.
31. Laphria basifera, n. s., foem. Obscurè nigra, capite albido tomentoso, mystaee nigro, antemnarum articulo $3^{\circ}$ fusiformi, thoraee cano-sexvittato, abdominis lateribus albido-maculatis, apice compresso, alis subcinereis basi sublimpidis costre dimidio apicali fuseeseente.
Female. Dull black. Head with whitish tomentum and hairs. Face slightly convex towards the epistoma. Mystax with several black bristles. Proboscis lanceolate, stout, straight. Third joint of the antemæ fusiform, as long as the 1 st and the 2nd. Thorax with six hoary stripes; the middle pair parallel, linear, very slender and almost eontignous. Abdomen with whitish spots along eaeh side, compressed at the tip. Legs with whitish hairs and with black bristles. Wings greyish, almost limpid towards the base, brownish along the apieal part of the costa; veins black. Length of the body 6 lines ; of the wings 12 lines.
Singapore.
This may be the female of the following species.
32. Laphria radicalis, n. s., mas. Nigra, capite argenteo, mystace nigro, antennarum articulo $3^{\circ}$ lineari, thorace strigis quatuor lateralibus transversis vittisque duabus intermediis albidis, abdominis lateribus albido-maculatis, rentre testaceo, alis uigro-fuscis dimidio basali limpido.
Male. Black. Head beneath with whitish hairs. Face flat, with silverywhite tomentum. Mystax with a few black bristles. Proboseis linear, rather slender. Third joint of the antennæ linear, a little longer than the 1st and the 2nd. Thorax with two transverse whitish marks on each side, and with two whitish middle stripes which are broader and further apart than those of L. basifera. Peetus with testaceous whitish tomentum. Abdomen with a row of whitish spots along each side; underside testaceous except at the tip. Legs with blaekish hairs ; femora with testaceous hairs. Wings blackish brown, limpid for almost half the length from the base; veins blaek. Halteres whitish. Length of the body 5 lines; of the wings 10 lines.
Mount Ophir, at the height of 4.000 feet.
33. Laphrta inatrea, n. s., focm. Obscurè nigra, capite, thoracis lateribus, pectore abdominisque marginibns fulvo-tomentosis, mystace nigro, antennarum articulo $3^{\circ}$ longi-fusiformi, thorace einereo-bivittato, abdomine ferrugineo, apice nigro, alis obscurè fuscis basi pallidioribus.
Female. Dull black. Head, sides of the thorax, peetus, and hind borders of the abdominal segments with tawny tomentum. Face slightly eonvex towards the epistoma. Mystax with a few black bristles. 'Third joint of the antennæ very elongate-fusiform, longer than the 1st and the 2 nd. Thorax with two parallel cinereous stripes. Abdomen ferruginous, black and shining towards the tip; underside somewhat cinereous. Legs with tawny hairs. Wings dark brown, somewhat paler towards the base; veins black. Halteres testaceous. Length of the body 8 lines; of the wings 14 hines. Singapore.
34. Laphria basigutta, n. s., mas. Nigra, capite aureo, mystace nigro, antennarm articulo $3^{\circ}$ lineari, thorace abdomineque fulvo-tomentosis, alis nigricantibus basi sublimpidis.
Male. Black. Face almost that, with pale gilded tomentum. Mystax with
very few black bristles. Proboscis linear, more slender than that of $L$. redicalis. Third joint of the antenme linear, a little longer than the 1 st and the 2 nd, more slender than that of L. radicalis. Thorax with dull tawny tomentum; pectus more cincreous. Abdomen more slightly tawny. Legs with cinereous hairs and black bristles. Wings blackish, almost limpid towards the base ; reins black. Halteres tawny. Length of the body 5 lines; of the wings 9 lines.
Singapore.
35. Lapmiti fusiferi, n. s., fom. Nigra, cinereo-tomentosa, capite albido, mystace nigro, antemarum articulo $3^{\circ}$ fusiformi, thoracis vittis duabus pectoreque canis, abdomine apicem versus rufo, alis subcinereis apud costæ dimidium apicale fuscescentibus.
Allied to L. crassipes, Fabr. Female. Black, with grevish tomentum. Head whitish in front, with white hairs beneath; face very convex towards the epistoma. Mystax with a few black bristles. Proboscis oblique, ascending, stout, straight, lanceolate. Third joint of the antenme fusiform. Thorax with two hoary stripes; sutures and pectus hoary. Abdomen pale red towards the tip which is compressed. Legs with whitish hairs and black bristles. Wings greyish, brownish for half the breadth along the apical half of the costa; reins black. Length of the body 6 lines; of the wings 12 lines.
Singapore.
36. Laphita sobria, n. s., feem. Nigra, fulvo-tomentosa, capite albo, mystace nigro, abdominis apice glabro, tibiis ferrugineis, alis cinereis basi sublimpidis.
Female. Black. Face flat, with shining white tomentum. Mystax with a few black bristles. Proboscis straight, slender, linear. Thorax and abdomen with tawny tomentum, the latter bare and shining towards the tip. Pectus more cinereous. Tibix somewhat ferruginous. Wings dark cinereous, almost limpid towards the base; reins black. Halteres testaceous. Length of the body 5 lines; of the wings 10 lines.
singapore.
37. Laphria playa, in. s., mas. Nigra, cinerco-tomentosa, capite albido, mystace nigro, antemarum articulo $3^{\circ}$ elliptico, jedibus fulvis, alis cincreis, halteribus albidis.
Male. Black, with cinereous tomentum. Face whitish, flat. Mystax with very few black bristles. Proboscis straight, porrect, slightly lanceolate, somewhat short. Third joint of the antenme elliptical, a little shorter than the 1st. Pectus hoary. Legs tawny. Wings grey; veins black, Halteres whitish. Length of the body 4 lines; of the wings 10 lines.
Singapore.
38. Laphria imbellis, n. s., fom. Nigra, cinereo-tomentosa, capite albido, mystace albo, antennis fulvis, thoracis strigis transversis quatuor lateralibus vittisque tribus intermediis canis, abdominis segmentis maculis lateralibus albidis, pedibus fusco-fulvis, alis limpidis apice fuscis, halteribus albidis.
Femele. Black, with cincreous tomentum. Head with white hairs beneath. Face whitish, slightly convex towards the epistoma. Mystax with a fesw
white bristles. Proboscis lanceolate, short, straight, porrcet. Aatcunie tawny. Thoras with two transverse hoary marks on each side, and with three indistinct hoary stripes. Pectus whitish. Abdominal segments with a transerse whitish spot on each side of the hind border. Legs tawny, with pater hairs ; coxe black ; anterior tarsi towards the tips, hind tarsi at the base, and hind tibix brown. Wings limpid, brown at the tips; veins black. Halteres whitish. Length of the body 5 lines; of the wings 10 lines.
Singapore.

## Subfam. Asilites, Walk.

## Gen. Asilus, Limu.

39. Asilus fusiformis, n. s., fem. Niger, cinereo-tomentosus, capite albido, mystace testaceo, thoracis vittis tribus pectoreque canis, abdominis apice compresso glabro, pedibus rufis, taris nigris, femoribus anterioribus nigromaculatis, alis subcinereis.
Female. Black, with cinereous tomentum. Head whitish in front, rather thickly clothed with whitish hairs; a few black bristles behind ; face slightly couvex towards the epistoma. Mystax with several testaceons bristles. Proboscis stout, straight, lanceolate. Palpi with thick black bristles. Antemne black. Thorax with three indistinct hoary stripes. Pectus hoary. Abdomen oblanceolate, with whitish and black hairs, compressed, shining, and bare towards the tip. Legs red, very stout, beset with black spines; tarsi except at the basc and knces black; a black spot on each of the auterior femora. Wings slightly cinereous; veins black, tamy at the base and along the costa. Halkeres testaceous. Length of the body 13 lines; of the wings 24 lines.
Malacea.
40. Asilus lineosus, in. s., foem. Fuscus, capite subaurato, mystace testaceo nigroque, antemis pedibusque nigris, thorace aureo-quadrivittato, abdomine fulvo-fasciato, apice nigro compresso transversè ruguloso, tibiis luteis apice nigris, alis cincreis.
Female. Dark brown. Head with pale gilded tomentum, clothed beneath with whitrsh hairs ; face convex towards the epistoma. Mystax with several testaceous bristles and with a few more slender black bristles. Proboscis stout, straight, lanceolate. Palpi thickly beset with black bristles. Antemne black; arista almost thrice the length of the 3rd joint whieh is fusiform. Thorax with four dull pale gilded stripes ; sides and pectus cinereous. Abdomen oblanceolate, with broad fawn-coloured bands, black, shining, compressed and transversely rugulose towards the tip. Legs black, armed with black spines ; tibix pale luteous, with black tips; onychia pale huteous. Wings cinereous ; veins black. Halteres ferruginous. Length of the body 12 lines; of the wings 20 lines.
Singapore.
41. Asilus debilis, n. s., mas. Cinereus, capite flavido-albo, mystace testaceo migroque, antemnis fulvis, thorace fusco-bivittato, abdominis segmentis cano-
fasciatis, pedibus testaceis, femoribus tibiisque apice tarsisque nigricantibue, alis sublimpidis apice nigricantibus.
Male. Cinereous. Head with yellowish-white tomentum, clothed beneath with white hairs; face very slightly convex towards the epistoma. Mystax with a few testaccous, and with still fewer black bristles. Proboscis black, slightly lanceolate, rather slender. Antennæ tawny; 3rd joint and axista black, the latter four times the length of the former which is fusiform. Thorax with two brown stripes. Pectus hoary. Abdomen with a hoary band on the hind border of each segment. Legs testaceous, with very few black bristles; tarsi, except at the basc and tips of the femora and of the tibix, black; hind femora and hind tibiæ mostly black. Wings nearly limpid, blackish towards the tips; veins black. Halteres testaceous. Length of the body 7 lines; of the wings 14 lines.
Malacca.
42. Astles latifascia, in. s., huas. Cinereo-niger, capite albido, mystace testaceo, thoracis vittis quatuor pectoreque canis, abdomine ferrugineo, basi apiceque nigris, pedibus fulvis nigro-variis, alis nigricantibus margine postico fusco.
Male. Black, with a slight cinereons tinge. Head with some whitish hairs beneath. Face whitish, flat. Mystax with many pale testaceous bristles. Proboscis straight, slightly lanceolate. Antemæ black. Thorax with four slight hoary stripes. Pectus hoary. Abdomen ferruginous, black at the basc and towards the tip. Legs tawny; tarsi, hind femora, and tips of the posterior tibiæ black ; anterior femora black abore. Wings blackish, brown along the hind border; reins black. Halteres testaceous. Length of the body 9 lines; of the wings $\mathbf{1 6}$ lines.
Singapore.
43. Asilus Barium, Walk. Cat. Dipt. pt. 2. 426.

Mount Ophir. Inhabits also Ceylon and Sumatra.

## Gen. Ommatius, Illiger.

44. Ommatius Pennus, Walk. Cat. Dipt. pt. 2. 469.

Nalacea. Inhabits also Sumatra, Borneo, and Corea.
45. Ommatius Hecale, W'alk. Cat. Dipt. pt. 2. 476.

Singapore.
46. Ommatits gracilis, n.s., mas. Nigro-fuscus, facie atrâ, thoracis lateribus pectoreque canis, pedibus fulvis, femoribus tibiisque apice tarsisque nigris, alis sublimpidis apice cinereis.
Male. Blackish-brown. Face flat, deep black. Proboscis black, rather slender, slightly lanceolate. Antemm black. Pectus and sides of the thorax hoary. Abdomen dull black. Legs tawny ; tarsi and tips of the femora and of the tibix black. Wings wearly limpid, dark grey towards the tips; veins black. Halteres testaceous. Length of the body 6 lines ; of the wings 10 lines. Mount Ophir.

# Fam. LEPTID $E$, Westw. 

Gen. Leptis, Fabr.
47. Leptis decisa, n. s., mas. Nigra, capite albo, antennis testaceis basi nigris, thoracis callis testaceis, vittis duabus pectoreque canis, abdomine testaceo, vittâ dorsali fasciisque nigris, femoribus testaceis apice nigris, alis sublimpidis fasciâ apiceque fuscis.
Male. Black. Head white in front. Antenne testaceous, black towards the base. Humeral calli testaceous. Thorax with two hoary stripes; sides and pectus hoary. Abdomen testaceous, with a black dorsal stripe and a black band on the hind border of each segment. Femora testaccous, with black tips; hind femora black for more than half the length from the tips. Wings nearly limpid, pale brown towards the tips, and with a darker brown band which tapers irregularly from the costa to the hind border and crosses the base of the discal areolet ; veins black. Halteres testaceons. Length of the body $4 \frac{1}{2}$ lines; of the wings 9 lines.
Malacca.

## Fam. BOMBYLID $A$, Leach.

Gen. Anthrax, Fabr.
48. Antirax degenera, n. s., mas et foem. Nigra, pectore albido, abdominis lateribus ferrugineis, ventre testaceo, alis subcinereis, pedibus basi testaceis. Mas. Alis basi et apud costam nigro-fuscis. Fem. Alis plus dimidio basali nigro-fuscis.
Male and Female. Dull black. Head not broader than long. Antennæ small; 3rd joint short-conical ; arista somewhat longer than the 3rd joint. Pectus whitish. Abdomeu blackish-brown, ferruginous on each side, testaceous beneath. Legs long, slender. Wings greyish; veins black; radial vein curved towards its tip; fore fork of the cubital undulating, parallel to the radial, forming near its base an obtuse angle which emits the stump of a vein; hind fork straight; three nearly straight externo-medial veins; 2nd connected with the 3rd by an undulating and very oblique veinlet; subanal vein near the anal on the border. Halteres testaceous.-Male. Hind femora testaceons towards the base; anterior femora dark testaccons. Wings blackish-brown at the base and along the costa.-Female. Hind femora testaceous with black tips; anterior femora paler testaceons. Wings blackish-brown for much more than half the length from the base. Length of the body $3 \frac{1}{2}$ lines; of the wings 10 lines.
Singapore.

## Fam. DOLICHOPIDÆ, Leach.

## Gen. Psilopus, Meigen.

49. Psilopus clarus, n. s., mas. Viridis, capite eyaneo, facie pectoreque albis, antennis nigris, abdominis segmentis nigro-fasciatis, pedibus testaceis, tibiis posticis apice tarsisque nigris, alis limpidis.
Male. Green. Head bright blue, white in front. Proboscis, legs and haltere
testaceous. Antenne black; arista as long as the thorax. Pectus white. Abdominal segments with black bands. Legs long; tarsi and tips of the hind tibie black. Wings limpid; veins black; fore branch of the preebrachial vein slightly curred; hind branch extending to the border; discal transserse rein rather deeply undulating. Length of the borly $4 \frac{1}{2}$ lines; of the wings 8 lines.
Mount Ophir.
50. Psilopus robustes, n. s., fem. Puppreo-cyanens, capite jurpureo, facie pectoreque albis, antennis pedibus halteribusque testaccis, thorace viridi-vario, abdominis fasciis nigris, tarsis apice nigricantibus, alis subcinereis.
Female. Purplish-blue. Head bright purple, white in front. Proboscis and antenne testaceous; arista black, full as long as the thorax. Thorax green ou each side and in front. Pectus white. Abdomen with black bands. Legs long, pale testaceons; tarsi blackish towards the tips. Wings slightly greyish; veins black; fore branch of the prebrachial vein moderately enred; discal transverse rein moderately undulating. Halteres pale testaceons. Length of the body $2 \frac{1}{2}$ lines; of the wings 6 lines.
This may be the female of $P$. clajus.
Singapore.
51. Psilopts subnotates, n.s., mas. Cyanens, capite purpureo, facie pectoreque albis, proboscide antennis perlibusque testaceis, thoracis lateribus anticis viridibus, abdomine riridi-cyaneo basi apiceque purpurascente, tarsis apice nigricantibns, alis subcinereis albido-bifasciatis.
Male. Blue. Head purple above, white in front. Proboscis and antennm testaccons; arista black, neaily as long as the thorax. Thorax green on each side in front. Pectus white. Abdomen greenish-blue, purplish at the base and at the tip. Legs testaceous, rather long; tarsi blachish towards the tips. Wings slightly greyish, with two imperfect whitish bands; hind border white towards the tip; costa interruptedly blackish; reins black; fore branch of the prebrachial vein almost straight ; hind branch extending to the border; discal transecrec rein almost straight, hardly mululating. Halteres pale testaccous. Length of the body $2 \frac{1}{2}$ lines; of the wings 6 lines. Mome Ophir.
52. Mstlopus postices, h. s., mas. Viridis, proboscide antemnis abdominis fasciis pedibusque nigris, tibiis luridis, alis nigris apud marginem posticsublimpidis.
Male. Dark green. Head above bluish-green. Proboscis and antemuæ ${ }^{\circ}$ arista nearly as long as the body. Abdomen with black bands. Legs black; posterior tibie lurid; fore tibie testaccons. Wings black, rather narrow, nearly limpid along the hind border; reins black; fore branch of the prexbrachial rein slightly curved; discal traneverse vein slightly undulating. Halteres black. Length of the body 2 lines; of the wings 5 lines.
Malacea.
53. Psilopus tenebrosus, n.s., fom. Purpureo-niger, facie pectoreque albis, abdomine purpurco, pedibus fulvis, femoribus apice tarsisque nigricantibus, alis nigricantibus margine postico fasciâque sublimpidis.

Female. Purplish-black. Head dull black, white in front. Proboseis piceous. Antennæ black; arista rather shorter than the thorax. Peetus white. Abdomen dark purple. Legs tawny; tarsi and tips of the femora blackish. Wings blackish, nearly limpid along the hind border, and at two-thirds of the length with a nearly limpid band which extends from the hind border to the cubital vein; veins and halteres black; fore branch of the prebrachial vein very deeply curved; discal transverse rein almost straight. Length of the body 3 lines; of the wings 6 lines,
Singapore.

## Fam. STRPIIID E, Leach.

Gen. Ceria, Fabr.
54. Ceria Javana, Wied. Auss. Zueifl. ii. 81. 1.

Malacea. Iuhabits also Java.

## Gen. Eristalis, Latr.

55. Eristalis Amphicrates, Walk. Cat. Dipt. pt. 3. 623.

Malacea. Inhabits also Hindostan, Java, and China.
56. Eristabs niger? Wied. Auss. Zweif. ii. 183. 45.

Singapore. Inhabits also Java?
57. Eristalis singularis, 11. s., fœim. Ater, aristâ nudâ, pedibus posticis subinerassatis, tibiis anterioribus basi testaceis, alis subeinereis apud costre medium nigricantibus.
Female. Deep black. Head shining in front. Arista bare. Legs shining; hind femora rather thick; hind tibiæ slightly dilated; anterior tibiæ pale testaceons towards the base. Wings gregish, with a blackish tinge along the middle of the costa; veins black. Length of the body 4 lines; of the wings 8 lines.
Singapore.

## Gen. Melophiluts, Meigen.

58. Helophilus insignis, n. s., fem. Nigricans, capitis lateribus anticis pectorisque faseiis duabus testaceis, antennis ferrugineis, thoracis vittis quatuor, seutello abdominisque fasciis tribus luteis, hujus marginibus subehalybeis, tibiis fulvis apice nigricantibus, alis subcinereis basi subluridis apud costre dimidium apicale fuscescentibus.
Female. Blackish. Head pale testaceous on each side in front. Antennæ ferruginous. Thorax with four lutcous stripes. Pectus with a testaceous band on each side. Scutellum luteous. Abdomen with three hiteous bands; 1st broad, interrupted; 2nd narrower than the 1st, broader than the 3rd; hind borders of the segments slightly chalybeous and shining. Tibix tawny, with blackish tips. Wings slightly greyish, with a lurid tinge at the base, and a slight brownish tinge along the costa beyond the middle; weins black, tawny towards the costa. Halteres testaceous. Length of the body 8 lines ; of the wings 14 lines.
Singapore.

## Gen. Xilota, Meigen.

59. Nilota conformis, n. s., feem. Enea, capite femoribusque chalybeis, antennis fulvis, thorace testaceo-bivittato, abdominis fasciis duabus latis interruptis pedibusque testaceis, alis subcinereis.
Female. Eneous. Head chalybeons, with whitish tomentum in fiont, with short white hairs beneath. Proboscis black. Antemm tawny; arista bare. Thorax with two testaceous tomentose stripes. Pectus with a testaceous band on cach side. Abdomen with two broad interrupted testaceous bands. Legs testaceous; femora chalybeous; tarsi with brownish tips. Wings slightly greyish; reins black; stigma brown. Halteres testaceous. Length of the body 5 lines; of the wings 10 lines.
Singapore.
Gen. Milesti, Lati.
60. Milesia macularis, Wied. Auss. Zweift. ii. 107. 5.

Singapore. Inhabits also Java.
61. Milesia Reinwardtii, Wied. Auss. Zueiff. ii. 10t. 1.

Singapore. Inhabits also Java.
62. Milesia tespoïdes, n. s., mas. Atra, verticis maculâ trigonâ testaceâ, abdominis fasciâ latissimâ lutê̂, fcmoribus posticis extùs apices versus ferrugincis, alis fuscis apice hurdis margine postico cinereis.
Mate. Deep black. Head with a minute elongate-triangular testaceous spot on the rertex; fore part and humeral calli shining. Abdomen partly clothed with black hairs, with a rery broad luteous band which occupies rather more than half the hind part of the 2nd segment and the fore half of the 3rd. Hind femora ferruginous on the outer sides towards the tips. Wings dark brown, hrid towards the tips, grey along the hind border. Halteres pale testaceous. Length of the body 11 lines; of the wings 22 lines. Singapore.

## Gen. Sirphes, Fabr.

63. Syrfhus consequens, n. s., mas et form. Luteus, rertice nigro, antennis nigro-rittatis, thoracis disco chalybeo, abdominis fasciis quatuor atris, femoribus posticis apice necnon tibiis tarsisque posticis nigris, alis subcinereis apud costam subfuscis.
Closely allied to S. ericetorum.-Male and Female. Palc luteons. Head black and slining on the vertex by the antcmm, pale testaceous in front. Proboscis tawny. Antennæ tawny, with a black dorsal stripe; arista black. Disk of the thorax chatybeous. Abdomen with fonr deep black bands on the lind borders of the segments. Hind tibie, hind tarsi, and tips of hind femora black. Wings slightly greyisl, with a brown tinge along the costa; reins black. Halteres pale testaceous.-Female. Vertical callus capitate. Length of the body $4 \frac{1}{2}-5 \frac{1}{2}$ lines; of the wings $10-12$ lines.
Singapore and Mount Ophin.
64. Syrpits duplex, n. s., mas et foem. Chalybeo-niger, gracilis, antemis maris piceis femine fulvis, abdominis fasciis tribus interruptis testaceis,
femoribus anterioribus testaeeis apice nigris, postieis basi testaceis, alis subcinereis.
Male and Female. Chalybeous blaek, slender. Antemm of the male piccous, of the female tawny. Abdomen with three dull interrupted testaceous bands, slightly eompressed for three-quarters of the length in the male. Legs black ; anterior femora testaceons with black tips ; hind femora testaeeous at the base. Wings grepish; veins and stigma black. Halteres testaecous. Length of the body 6 lines; of the wings 12 lines.
Singapore.
65. Strpius triligates, u. s., mas. Flavus graeilis, antemis fulvis, thoracis disco chal beo-nigro, pectore et metathorace nigris, abdominis fasciis quathor latis quatnorque angustis nigris, femoribus posticis nigro latè fasciatis, tibiis tarsisque posticis nigris, alis subcinercis.
Male. Pale yellow, rather slender. Antennæ tawny. Disk of the thorax ehalybeous black. Peetus and metathorax mostly blaek. Abdomen with eight black bands which are alternately broad and narrow. Hind femora with a broad black band ; hind tibix and hind tarsi blaek. Wings greyish; stigma brown ; veins black. Halteres pale testaeeous. Length of the body $4 \frac{1}{2}$ lines; of the wings 9 lines.
Mount $\mathrm{O}_{\mathrm{p}} \mathrm{hin}$.

Fam. MUSCID A, Latr:
Subfam. Tachindes, Walk.

## Gen. Echunomila, Duméril.

66. Echinonyla brevipervis, n. s., mas. Nigra, capite anticè albo, frontalibus ferrugineis, scutello abdominisque fasciis tes1aceis, alis subeinereis parvis bâsi limpidis.
Male. Blaek, stout. Head white, with white hairs beneath; front and vertex blaek, shiming ; frontalia ferruginous, slightly widening from the vertex to the antcmer ; epistoma slightly promment. Antennæ extending to twothirds of the length of the face ; 3rd joint truneated, not mueh longer than broad, much broader and shorter than the 2 nd ; arista stout, tapering from its two indistinct basal joints, full twice the length of the 3rd joint. Seutellmm testaecous. Abdomen elongate-oval, longer than the thorax. Wings greyish, rather short, limpid towards the base; veins black, testaeeons towards the base; prebraehial rem forming a very slightly aente angle at its flexure, near which it is very deeply curred inward, and is thence straight to its tip whieh joins the tip of the costal ; diseal transverse rein straight, parted by mueh less than its length from the border, and by little more than half its length from the flexure of the prebrachial. Alulæ greyish, with testaeeons borders. Length of the borly 6 lines; of the wings 9 lines.
Mount Ophir, at the height of 4000 fect.

## Gen. Tachiva, Fabr.

67. Tachina Ophirica, n. s., fom. Cinerea, latiuscula, capite argenteo, fron-
talibus atris, thoracis vittis quatuor interruptis nigris, scutelli margine abdominisque fasciis canis, alis subcinereis.
Female. Cinereous, rather short and broad. Head hoary, silvery-white above and in front ; frontalia deep black, slightly widening from the vertex to the antennæ; facialia without bristles ; epistoma lardly prominent. Antennæ extending to about three-quarters of the length of the face; 3rd joint linear, slender, rounded at the tip, about twice the length of the 2nd; arista stout for about half its lengtl, very much longer than the 3rd joint. Thorax with four slender interrupted black stripes; scutelhm with a hoary border. Abdomen black, obconical, hardly longer than the thorax ; a broad hoary band on the fore border of each segment. Wings slightly greyish; veins black; prebrachial vein forming an almost right and rather welldefined angle from whence it is slightly curred inward to its tip; discal transrerse vein hardly curved inward, parted by rather less than its length from the border and from the flexure of the prebrachial. Alnle white. Length of the body 4 lines; of the wings 8 lines.
Mount Ophir, at the height of 4000 fect.

## Gen. Masicera, Macquart.

68. Masicera tomentosa, Macq. Dipt. Exot. Suppl. 2.

Mount $\mathrm{O}_{\mathrm{p}}$ hir, at the leight of 4060 feet.
69. Masicera ticaria, in. s., fem. Nigra, longiuscula, capite albo, frontalibus atris, thoracis rittis quatuor, lateribus scutello abdominisque fasciis duabus latis interrnptis canis, alis cinereis.
Female. Black, rather long. Mead white, with short white hairs beneath and behind; frontalia linear, dcep black; facialia without bristles; epistoma not prominent. Eyes pubescent. Antenne extending nearly to the epistoma; 3rdjoint linear, slender, slightly rounded at the tip, about four times the length of the 2 nd ; arista rather stout for full one-third of the length from the base, very much longer than the 3 rd joint. Thorax with four hoary stripes; sides and scutellum hoary. Abdomen elongate-obconical, much longer than the thorax, with two broad interrupted hoary bands. Legs stout. Wings grey ; veins black; prebrachial vein forming a rather obtuse angle at its flexure, from whence it is slightly eurved inward to its tip; discal transverse vein undulating, parted by very little less than its length from the border and from the flexure of the probrachial. Alnlæ whitish. Length of the body 5 lines; of the wings 9 lines.
Singapore.

## Gen. Eurigaster, Macquart.

70. Eurigaster muscoïdes, n. s., fem. Nigra lata, capite albido, frontalibus nigris, palpis testaccis, thorace cano nigro-quadrivittato, scutelli apice fulvo, abdominc cano-fasciato, alis cinereis apud costam fuscescentibus.
Female. Black, broad, with long bristles. Head whitish; frontalia black, linear; facialia without bristles; epistoma not prominent. Ey̧es pubescent. Palpi testaceous. Antenme extending to the epistoma; 3rd joint linear, rounded at the tip, full four times the length of the 2 nd; arista
slender, very much longer than the 3rd joint. Thorax hoary, with four black stripes. Scutellum tawny towards the tip. Abdomen obeonical, hardly longer than the thorax, with a broad hoary band on each segment. Legs slender, hardly setose. Wings grey, brownish in front ; veins black; prebrachial vein forming a slightly obtuse angle at its flexure, from whenee it is slightly curved inward to its tip; discal transverse vein straight exeept a slight curve by its hind end, parted by much less than its length from the border, and by rather more than its length from the flexure of the proxbraclrial. Alulæ white. Length of the body 3 lines; of the wings 6 lines. Singapore.

## Gen. Zambest, n. g. (Plate I. fig. 2.)

Mas. Corpus longum, angustum, subeylindricum. Facies verticalis, subretracta. Facialia nuda. Epistoma plamum. Palpi longinseuli, sat graciles. Antennarum articulus $3^{\text {us }}$ gracilis, linearis, $2^{\circ}$ sexties longior ; aristâ gracillimâ. Oculi nudi. Abdomen lineare, thorace multò longius. Pedes longiusculi. Alce sat angustæ.
Male. Body long, narrow, almost cylindrical. Face vertical, slightly retracted towards the base. Facialia without bristles. Eyes remote, bare. Palpi rather long and slender. Antennæ extending to the epistoma; 3rd joint slender, linear, rounded at the tip, six times the length of the 2nd; arista very slender, rather longer than the 3rd joint. Abdomen linear, much longer than the thorax. Legs rather long. Wings rather narrow; costal vein ending at hardly in front of the tip of the wing ; brachial vein joining the cubital.
71. Zambesa ocypteroïdes, n. s., mas. Nigra, capite albo, frontalibus atris, antennarum articulo $3^{\circ}$ fulvo, thorace cano nigro-quadrivittato, abdominis fasciis duabus latis interruptis semihyalinis albido-testaceis, femoribus testaceis apice nigris, tibiis piceis, alis limpidis, apice margineque postico cinercis.
Male. Black. Head white, with short white hairs beneath; frontalia deep black, linear. Proboscis testaccous. Palpi black. Third joint of the antemme tawny. Thorax hoary, with four black stripes, of whieh the outer pair are very much broader than the inner pair. Abdomen a little narrower than the thorax, with two broad whitish testaceous semihyaline bands which are interrupted above. Femora testaccous, with black tips; tibiæ piceous. Wings limpid, grey towards the tips and along the hind borders; reins black; prebrachial vein forming an obtuse angle at its flexure from whence it is slightly curved inward to its tip, which joins the cubital very near the border; discal transverse vein very slightly curred inward, parted by less than its length from the border, and by more than its length from the flexure of the prembachial. Alnla white. Length of the body 5 lines; of the wings 10 lines.
Singapore.
Subfam. Dexides, Walk:
Gen. Dexia, Meigen.
72. Dexta divergexs, n. s. (gen. Thelaira, Desr.), mas. Cana longa an-
gusta, capite albo, frontalibus atris, proboscide palpis antemisque testaccis, aristâ phmosâ, thorace nigro-quadrivittato, abdomine testacco semilyyalino, vittâ fasciisque nigris, pedibus longis testaceis, tarsis nigris, alis subcinereis.
Mate. Body hoary, long, narrow, with long black bristles. Head white; frontalia decp black, widening from the vertex to the antemne; facialia without bristles; cpistoma not prominent. Eyes bare. Proboscis and palpi testaceous. Antcmne testaceous, not nearly extending to the epistoma; 3rd joint slender ; arista black, plumose. Thorax with four black stripes, of which the outer pair are broader than the immer pair. Abdomen testaceous, scmilyyaline, with a black dorsal stripe, and with a black band on the hind border of each segment. Legs long, testaceous ; tarsi black. Wings greyish; veins black; prebrachial vein forming a hardly obtuse angle at its flexure, from whence it is indistinctly undulating to its tip which joins the costal at a little in front of the tip of the wing ; discal transverse vein slightly curved inward near its hind end, parted by hardly more than half its length from the border, and by hardly less than its length from the flexure of the prebrachial. Alule whitish. Leagth of the body 6 lines; of the wings 11 lines.
Mount Ophin.

## Subfam. Saricophagides.

## Gen. Sarcophaga, Meigen.

73. Sarcophaga ruficormis, Fabr. Syst, Antl. 287. 12. (Musca.)

Malacea. Tuhabits also Hindostan.
7. Sarcophiga reciproca, n.e., fem. Cana, capite albo, frontalibus palpis antemis thoracis rittis pedibusque nigris, abdomine subtessellato, alis subcinereis.
Female. Hoary. Head white; frontalia black, linear. Proboscis, palpi and ontennæ black. Thorax with three black stripes, and with black lines intersceting the two intermediate hoary stripes. Abdomen slightly tessellated. Legs black. Wings greyish; veins black; prebrachial forming a right angle at its flexure, near which it is much curved inward, and is thence straight to its tip; discal transverse vein slightly modulating, parted by less than its length from the border, and by little more than balf its length from the flexure of the prebrachial. Alule white. Length of the body 6 lines; of the wings 11 lines.
Singapore. A smaller specimen from Malacea apparently belongs to this species.
75. Sarcophaga aliena, n. s., form. Cama, capite albo, frontalibus palpis antemis thoracis rittis pedibusque nigris, abdomine tessellato, alis subcinereis.
Female. Hoary. Head white; frontalia black, slightly wideving in frout. Proboscis, palpi and anteme black. Thorax with three black stripes, and with black lines intersecting the two intermediate hoary stripes. Abdomen tessellated. Legs black. Wings slightly greyish; reins black; prebrachial forming a very slightly achte angle at its flexure, near which it is much cursed inward, and is thence straight to its tip; diseal transverse vein
hardly undulating, parted by a little less than its length from the border, and by much more than half its length from the flexure of the prebrachial rein. Alulæ white. Length of the body 4 lines; of the wings 8 lines. Mount Ophir.

## Subfam. Muscides.

## Gen. Idda, Meigen.

76. Idia tenebross, n. s., fom. Obscurè viridis punctata, capite pedibus halteribusque nigris, antennis piceis, alis fusco-cinereis apud costam nigris.
Female. Dull green. Head slightly tuberculated above, black and shining in front. Frontalia dull black, hardly decreasing in breadth to the base of the antenne which are piceous. Thorax very minutely punctured, with a slight hoary tinge which is interrupted by three slender indistinct black stripes. Abdomen shining, thickly punctured. Legs black. Wings brownish grey, black along the costa. Alulæ grey, with black borders. Halteres black. Length of the body $4 \frac{1}{2}$ lines; of the wings 7 lines.
Mount Ophir. Inhabits also South Africa.
77. Idia bicolor, n. s., fuem. Tinidis, capite albido, facie nigrầ, frontalibus obscurè nigris, antennis fulvis, thorace nigro-quadrivittato, abdomine æneomarginato, vittâ dorsali nigrâ, pedibus nigris, alis cinereis costâ apiceque nigricautibus, halteribus albidis.
Femule. Green. Head whitish and shining abore, black and shining in front. Frontalia dull black, linear, furcate hindward. Antemne tawny. Thorax with a slight hoary bloom and with four slender black stripes. Abdomen æneous at the tip and along each sidc, and with a slight black dorsal stripe. Legs black; coxæ and femora green. Wings grey, blackish along the costa and at the tips. Alulxe dingy whitish. Halteres whitish. Length of the body 3 lines; of the wings 5 lines.
Malacea.

## Gen. Musca, Limn.

78. Musea flariceps, MIacq. Dipt. Exot. ii. 2. 145. 23. pl. 18. f. 1. (Lucilia.) (Genus Chrysomyia, Desr.)
Singapore. Inhabits also Hindostan.
79. Musca Chrysoïdes, n. s. (genus Chrysomyia, Desv.), mas. Sericeo-viridis, capite testaceo, palpis antennisque fulvis, abdominis vittâ dorsali fasciisque nigris, alis subcinereis apice obscurioribns.
Male. Sericeous green, hardly shining. Head testaccous. Proboscis black. Palpi and antennæ tawny. Abdomen with a black dorsal stripe, and with a black band on the hind border of each segment. Legs black; coxx and femora green. Wings greyish, much darker towards the tips; veins black, tawny along the costa; prebrachial vein forming a very obtuse and somewhat romded angle at its flexure, from whence it is slightly curved inward to its tip; discal transverse vein deeply undulating, parted by much less than its length from the border, and by a little less than its length from the flexure of the prebrachial vein. Alule dingy testaceous. Length of the body 5 lines; of the wings 10 lines.
Malacea and Mount Ophir.
80. Musca porphixina, n. s. (genis Lucilia, Desv.), fom. Purpurea, capite albido, autennis pedibusque nigris, palpis fulvis, abdomine reneo-purpureo, alis cinereis.
Female. Purple. Head whitish. Proboscis and anteunæ black. Palpi tawny. Thorax with a slight hoary tinge which is very indistinetly striped. Abdomen bronze-purple. Legs black. Wings grey; reins black; prebrachial rein forming a rery slightly obtuse angle at its flexure, from whence it is very slightly curred inward to its tip; discal transverse vein nearly straight, parted by little more than half its length from the border and from the flexure of the prebrachial. Alulæ dark grey. Length of the body $4 \frac{1}{2}$ lines; of the wings 9 lines.
Mount Ophir, at the height of 4000 feet.
81. Musca trita, n. s. (genus Lncilia, Desv.), fœem. Cyaneo-viridis, capite pedibusque nigris, facie albâ, thoracis lateribus subpurpurascentibus, abdominis lateribus apiceque albido-tomentosis, alis sublimpidis.
Female. Bright bluish-green. Head and appendages and legs black; face white. Sides of the thorax slightly purplish. Abdomen green, with slight whitish tomentum along each side and at the tip. Wings almost limpid; veins black; prebrachial vein forming a very obtuse and slightly rounded angle at its flexure, from whence to its tip it is hardly curved iuward; discal transverse vein hardly curved inward, parted by much less than its length from the border and by a little less than its length from the flexure of the prebrachial vein. Alulx greyish. Length of the body 3 lines; of the wings 6 lines.
Malacca.
82. Mesca Defixa, n. s. (genus Lucilia, Desv.), mas. Cyaneo-viridis, capite albido, epistomate testaceo, palpis pedibusque nigris, antemis fulvis, alis subeinereis.
Male. Bluish-green. Head whitish ; epistoma testaceous. Proboscis, palpi and legs black. Antenze tawny. Wings greyish; veins black; prebrachial vein forming a slightly obtuse and slightly rounded angle at its flexure, from whence to its tip it is moderately curved inward; discal transverse vein slightly undulating, parted by one-third of its length from the border, and by less than half its length from the flexure of the prexbrachial. Alule grey. Length of the body 3 lines; of the wings 6 lines.
Singapore.
83. Musca reflectens, n.s. (genus Pollenia, Desc.), fœm. Purpureo. cyanea, viridi-varia, capite fulvo, frontalibus cinereis, palpis antennisque testaceis, pectore testaceo, maculis duabus purpureo-cyaneis, abdomine cano-subtessellato, apice æneo, pedibus validis nigris, tibiis fulvis, alis subcinerascentibus.
Female. Pupplish-blue tinged with green, hardly shining. Head fawncolour, testaceous in front ; frontalia cinereous. Proboscis black. Palpi, antemm and pectus testaceons, the latter with a purplish-blue mark on each side. Abdomen slightly tessellated with hoary tomentum, æneous at the tip. Legs black, stout; tibie tawny. Wings very slightly greyish; reins black, testaceous towards the base and along the costa; prebrachial
wein forming a very obtuse angle at its flexure, from whence it is slightly mdulating to its tip; discal transverse vein very deeply undulating, parted by full half its length from the border, and by much less than its length from the flexure of the prebrachial vein. Alulæ white. Length of the body 5 lines; of the wings 10 lines.
Malacca.
84. Musca infixa, n.s. (genus Silbomyia, Macq.), fom. Viridi-cyanea, capite albido, frontalibus antennisque nigris, palpis fulvis, thoracis vittis quatnor abdomineque purpureis, pedibus piceis, femoribus cyanascentibus, alis cinereis costâ venisque fusco-marginatis.
Female. Greenish-blue. Head whitish. Frontalia, proboscis and antemx blaek. Palpi tawny. Thorax with four purple stripes. Abdomen purple. Legs piceous; femora bluish. Wings grey, brownish along the costa and along the borders of the veins, which are black; prebrachial vein forming an almost right and somewhat rounded angle at its flexure, from whence it is very slightly curved inward to its tip; discal transverse vein very slightly madating, parted by full half its length from the border, and by much more than its length from the flexure of the prebrachial vein. Alule dark grey. Length of the body 5 lines; of the wings 10 lines.
Singapore.
85. Musca fumipennis, n.s. (genus Silbomyia, Macq.), foom. Cyaneo-viridis, capite testaceo, frontalibus piceis, palpis antenuisque testaceis, thoracis vittis quatuor subobsoletis purpurascentibus, scutello abdomineque pur-pureo-cyaneis, pedibus nigris robustis densè pilosis, alis fuscis, apud costæ dimidinm basale sublimpidis.
Female. Bluish-green. Head pale testaceous ; frontalia piceons. Proboscis blaek. Palpi and antennæ testaceous. Thorax with four very indistinct purplish stripes. Scutellum and abdomen purplish-bluc. Legs black, stout, thickly pilose; fore coxæ tawny. Wings brown, paler at the tips and along the hind border, nearly limpid along the costa for half the breadth, and rather less than laalf the length from the base; veins black; probraehial vein forming a very slightly oblique and much-rounded angle at its flexure, from whence it is moderately curved inward to its tip; discal transverse vein nearly straight, parted by rather more than half its length from the border, and by much less than its length from the flexure of the prebrachial vein. Alulæ grey. Lengthe of the body 5 lines; of the wings 10 lines.
Singapore.
86. Musca dotata, n.s. (genus Phormia? Desv.), mas. Viridis, capite antico albo, palpis antennisque fulvis, nbdominis vittâ dorsali nigrâ fasceisque nigro-eneis, pedibus nigris, alis cinereis, dimidio apicali antico nigrofuseo.
Male. Green. Head white in front. Proboscis black. Palpi and antennæ tawny. Abdomen with a black dorsal stripe, and with blaekish bronze bands. Legs blaek. Wings grey; apical half blaekish-brown, excepting the hind border ; veins black; prebrachial vein forming a very obtuse and somewhat rounded angle at its flexure, from whence it is very slightly
eurved inward to its tip; discal transverse vein moderately undulating, parted by little more than half its length from the border and by rather less than its length from the flexure of the prebrachial. Alulæ grey. Length of the body $3 \frac{1}{2}$ lines; of the wings 7 lines.
Singapore.
87. Musca diffidens, u.s. (genus Pyrellia, Desv.), foem. Cyaneo-viridis, capite albido, palpis antemnis pedibusque nigris, alis rix cincrascentibus.
Female. Bright bluish-green. Head whitish. Proboscis, palpi, antennre and legs black. Wings hardly greyish; reins black; prebraehial vein gently curved at its flexure, from whence it is almost straight to its tip; diseal transverse vein almost straight, parted by mueh less than its length from the border, and by much more than its length from the curve of the prebrachial rein. Alulæ whitish. Length of the body 3 lines; of the wings 6 lines.
Singapore.
88. Musca confixa, n.s. (genus Pyrellia, Desv.), foem. Læetè riridis cyaneo purpureoque raria, eapite nigro, antice albido, palpis testaceis, antennis nigris basi rufescentibus, abdominis apice subæneo, pedibus nigris, alis einereis.
Female. Bright green, tinged with blue and purple along each side. Head black above, whitish in front. Proboseis black. Palpi testaceous. Antenme black; first and sceond joints reddish. Abdomen slightly æneous at the tip. Legs black; femora green. Wings grey; reins black; prebrachial vein gently curved at its flexure, betreen which and its tip it is slightly eurved inward; discal transserse vein moderately undulating, parted by much less than its length from the border, and by a little less than its length from the flexure of the prebrachial rein. Alulæ dark grey. Length of the body $3 \frac{1}{2}$ lines; of the wings 7 lines.
Mount Ophir, at the height of 4000 feet.
89. Musca refixa, n. s. (genus Pyrellia, Desv.), feem. Purpurea, lateribus subtùsque cyanea aut cyaneo-viridis, eapite antico, palpis pedibusque nigris, autemarum artieulo tertio piceo, alis subcinereis.
Female. Purple shining, blue on each side and beneath. Head in front, proboscis, palpi and legs black. Third joint of the antenne piecous. Wings slightly greyish; veins black; prebrachial vein forming a gentle curve at its flexure, which is very near the border, indistinetly curved outward from thence to its tip; diseal transverse rein almost straight, parted by little more than half its length from the border, and by about its length from the flexure of the prebrachial vein. Alulæ grey. Length of the body $2 \frac{1}{2}-2 \frac{3}{4}$ lines; of the wings $5-5 \frac{1}{2}$ lines.
Far. $\beta$. Bluish-green. Scutellum purplish-bluc. Discal transverse vein very indistinctly eurved inward.
Singapore.
90. Musca perfixa, n. s. (genus Pyrellia, Desr.), fem. Purpurea, capite palpis antennis pedibusque nigris, alis limpidis.
Female. Very nearly allied to M. refixa. Purple, shining. Head and appendages and legs black. Wings limpid; reins black; prebrachial rein
forming a gentle curve at its flexure which is rery near the border, straight from thence to its tip; discal transverse vein almost straight, parted by about half its length from the border, and by a little more than its length from the flexure of the prebrachial vein. Alulæ whitish. Length of the body 3 lines; of the wings 6 limes.
Mount Ophir.
91. Musca affixa, n. s. (genus Morellia, Desv.), mas. Obscurè nigra, capite antico albo, thoracis vittis tribus latis albidis, abdomine snbtessellato, alis subemereis.
Male. Dull black. Mead white in frout. Thorax with three broad whitish stripes. Abdomen slightly tessellated. Wings greyish; veins black; prebrochial vein forming a gentle curre at its flexure which is very near the border, nearly straight from its flexure to its tip; discal transrerse vein hardly undulating, parted by less than half its length from the border, and by little less than its length from the flexure of the præbrachial vein. Alule grey. Length of the body 4 lines; of the wings 7 lines.
Nount Ophir.

## Subfam. Anthomidides, $W^{T}$ alk. Gen. Aricia, Macq.

92. Aricla argentita, n. s., mas. Cama, capite argenteo, palpis antennis pedibusque nigris, thoracis rittis duabus nigricantibus, scutelli apice testacco, abdominis maculis quatuor nigris dorsalibus basi testaceo, femoribus testaceis, alis subcinereis.
Male. Hoary. Head silvery-white. Proboscis, palpi, antennæ and legs black. Thorax with two blackish stripes. Scutellum towards the tip and femora testaceons. Abdomen with four black dorsal spots, testaceous towards the base. Wings and alulæ slightly greyish; veins black, testaceous towards the base; cubital and prebrachial veins slightly diverging for about two-thirds of their length from the prebrachial transverse vem, rery slightly converging from thence to the border; discal transverse vein oblique, slightly eursed inward along ite hind half, parted by a little more than its length from the prebrachial transverse, and by much less than its length from the border. Length of the body $3 \frac{1}{2}$ lines; of the wings 6 lines. Malacca.

## Gen. Midrotea, Macq.

93. Hrdroted solenvis, 11. s., mas. Nigra, eapite cano, thorace subcinereo nigro-trivittato, abdomine longi-obconico, tibiis ferrugineis, alis subcinereis.
Macle. Black. Head hoary in front. Thorax slightly cinereous, with three black stripes. Abdomen elongate-obconical. Tibiæ ferruginous. Wings slightly greyish; veins black, testaccons at the base; cubital and prebrachial veins slightly diverging for nearly two-thirds of their length from the prebrachial transverse vein, very slightly converging from thence to the border; discal transverse vein oblique, curred inward in the middle, parted by about its length from the prebrachial transserse and by little more than
half its length from the border. Alulæ greyish. Length of the body $2 \frac{8}{1}$ lines; of the wings 5 lines.
Mount Ophir, at the height of 4000 feet.
94. Aricia patula, n. s., mas. Nigra sat lata, antenmis, thoracis lateribus, abdomine pedibusque fulvis, abdominis apiee tarsisque nigris, alis cinercis.
Mate. Blaek, rather broad. Eyes bright red. Antemæ, sides of the thorax, sentellum, abdomen and legs tawny. Abdomen hardly longer than broad, black towards the tip. Tarsi black. Wings and alule grey ; veins black, tawny towards the base; cubital and probrachial veins diverging for more than two-thirds of their length from the prebraehial transverse, parallel from thence to their tips; discal transserse vein rery oblique, curved inward near its hind end, parted by more than half its length from the border, and by very little more than its length from the prebrachial transverse rein. Length of the body $3 \frac{1}{2}$ lines; of the wings 7 lines.
Singapore.

## Subfam. Helomizides, Fallen.

## Gen. Sarnuta, n. g. (Plate I.fig. 4.)

Helomyzae affinis; mas et fuem. Corpus sat latum. Antennarum articulus $3^{\text {ns }}$ linearis; arista nuda. Femora antica subtùs tenuiter spinosa. Alce latiusculæ.
Allied to Helomyza. Male and Female. Body rather broad. Third joint of the antenne linear, rounded at the tip; arista bare. Fore femora with slender spines. Wings somewhat broad ; discal transverse vein slightly oblique, parted by much less than half its length from the border, and by about its length from the prebrachial transverse vein.
95. Narnuta leucotelts, n. s., mas et fem. Ferrugineo-fulva, antennis testaccis, pedibus fulvis, alis nigro-fuscis apice albis, margine postico sub-cinereo.-Fœm. Abdominis apice nigro.
Male and Female. Ferruginous tawny, with black bristles. Head rather paler. Antemæ testaccous ; wista black. Legs tawny ; fore femora with black spines beneath. Wings blackish-brown, greyish aloug the hind border for more than half the breadth and less than half the length from the base; extreme tips white; veins black. Alule whitish testaceous.
Female. Tip of the abdomen black. Length of the body $3 \frac{1}{2}$ lines; of the wings 7 lines.
Singapore.

## Gen. Helomyza, Fallen.

96. Helomyza intereuns, h. s., mas. Fulva, capite metathorace pectore pedibnsque testaeeis, abdominis maculis transversis nigricantibus, tarsis ferrugineis, alis subcincreis apices versus ct apud venam transversan discalem fuscis.
Mcte. Tawny with black bristles. Head, metathorax, pectus, legs and halteres testaceons. Abdomen with a transrerse blackish mark on the disk of (ach segment towards the tip). Tarsi somewhat ferruginous. Wings slightly gresish; tips brown, which lme is darkest in frout ; veins tawny,
black towards the tips; transverse reins black. Discal transverse rein elouded with brown, parted by mneh less than its length from the border, and by much more than twice its length from the prebrachial transverse vein. Alulæ wlitish. Length of the body $2 \frac{1}{2}$ lines ; of the wings 5 lines. Malacea.
97. Helomyza exeuns, n. s., mas. Fulva, capite antico, metathorace pectore pedibusque testaceis, abdominis maculis transversis nigrieantibus, tarsis ferrugineis apiee fuscis, alis subcinereis maculâ apicibnsque fuscis.
Very nearly allied to II. intereuns. Mule. Tawny. Head in front, metathorax, pectus, legs and halteres testaceons. Abdomen with a transverse blackish mark on the disk of eaeh segment. Tarsi ferruginous, with black tips. Wings slightly greyish; tips brown; veins black, tawny at the base; a brown spot on the discal transverse rein, which is straight, slightly oblique, parted by less than its length from the border, and by abont thrice its length from the discal transverse vein. Alulæ whitish. Length of the body $2 \frac{1}{4}$ lines; of the wings $4 \frac{1}{2}$ lines.
Mount Ophir.

## Subfam. Lavxanides, Walk. <br> Gen. Lauxanta, Latr.

98. Lauxania eucera, n.s., mas. Nigra cinereo-tomentosa, eapite atrobiguttato, antemnis piceis longissimis, aristâ albâ, abdomine pedibusque fulvis, femoribus tibiisque nigro-fasciatis, alis subcinereis apud costam subhuridis.
Male. Black, with greyish tomentum. Head with a deep black spot on each side between the eyes. Proboscis dull tawny. Palpi blaek. Antemme piceons; 1st joint long; 3rd slender, cylindrical, longer than the 1st and the 2 nd together; arista white, pubescent, longer than the 3rd joint. Abdomen and legs tawny; femora and tibiæ with black bands; tarsi with black tips. Wings greyish, slightly lurid along the costa; veins black; discal transverse vein straight, slightly oblique, parted by less than its length from the border, and by more than twice its length from the preebrachial transverse vein. Halteres tawny. Length of the body 2 lines; of the wings $4 \frac{1}{2}$ lines.
Singapore.
99. Lauxania detereuns, n.s., fœm. Nigra, nitens, antennis pieeis, aristâ nigrầ, tarsis anticis basi tibiisque tarsisque posterioribus testaceis, alis subcinereis.
Female, Black, shining, with black bristles. Antennæ piceons; 3rd joint clongate-conical, much shorter than that of L.eucera; arista black, pubescent, full thrice the length of the 3rd joint. Fore tarsi at the base and posterior tibiæ and tarsi testaceons. Wings slightly greyish; veins and halteres testaceous; discal transverse vein straight, almost upright, parted by almost its length from the border and by nearly twice its length from the prebrachial transverse vem. Length of the body $1 \frac{1}{4}$ line; of the wings 3 lines.
Mount Ophir, at the height of 4000 fect.

## Gen. Celfpiuss, Dalman.

100. Celyphus obtectus, Dalman, Analecta Entomologica, 32. 1. pl. 2. B. f. 1-5.

Malacea. Inhabits also Hindostan and the Philippine Islands.

## Subfam. Ortalides, Haliday. <br> Gen. Limprogaster, Macq.

101. Lamprogaster zonata, n. s., fœem. Nigra, eapite flavo nigro-vario, antennis piceis, thorace flavo-quadrivittato, abdomine flaro-bifasciato, tarsis albis, alis subcinereis maculis costalibus fasciâque fuscis.
Female. Black, shining. Head pale yellow, with four black slining stripes in front; vertex, with a broad dull black stripe which occupies the whole breadth behind, is notched on each side between the eyes, and is narrower in front. Antemnæ piceous; 3rd joint nearly linear, rounded at the tip; arista minutely plumose, more than twice the length of the 3rd joint. Thorax with four yellow stripes, one on each side in front of the wings, and one on each side of the scutum. Abdomen with two yellow bands; 1st slender; 2nd apical, dilated in the middle of the fore border; knces tawny; tarsi white, with blackish tips. Wings greyish, slightly lurid and with brown marks at the base and along the costa, and with a brown band which extends along the prebrachial vein to half the space between the latter and the border; discal transrerse vein straight, upright, parted by about onethird of its length from the border, and by much more than its length from the prebrachial transverse, which is oblique. Halteres tawny. Jength of the body 5 lines; of the wings 10 lines.
Singapore.
102. Lamprogaster glabra, n.s., mas. Nigra, antennis piceis, abdominis fasciâ subapicali flavâ, tarsis albis, alis sublimpidis maculis basalibus fasciisque quatuor fuscis.
Male. Black, shining. Antenne piceous, in structure like those of L. zonata. Abdomen with a slender yellow band near the tip. Tarsi white, with black tips. Wings nearly limpid, with four brown bands, slightly testaceous and with some indistinct brown marks at the base; 1st and 3rd bands entire; 1st broader and darker than the others; 2nd and 4th interrupted; veins black, testaccous towards the base; discal transrerse vein straight, upright, parted by one-fourth of its length from the border, and by more than its length from the prebrachial transverse rein, which is also upright. Halteres tawny. Length of the body 3 lines; of the wings 6 lines.
Singapore.
103. Lamprogaster transtersa, i. s., foem. Nigra, capite fulvo fasciis duabus nigris unâque albidâ, antemis fulvis, thoracis vittis quatuor dorsalibus fulvis duabusque lateralibus albidis, abdomine nigro-purpurco basi fulvo maculisque duabus subapicalibus flavis, pedibus fulvis, tarsis albidis, alis subcinereis fusco sexfasciatis.
Female. Black. Head tawny, with two black bands above and a whitish band in front. Antennæ tawny. Thorax with four dorsal tawny stripes which
are confluent in front and with two lateral whitish stripes. Abdomen blackish-purple, tawny at the base, and with a yellow spot on eaeh side near the tip which is lanceolate. Legs tawny; tarsi whitish, with blaek tips; hind tibiee with brownish tips. Wings slightly greyish, with about six irregular macular brown bands; veins brown, tawny at the base ; diseal transverse vein nearly straight and upright, parted by mueh less than its length from the border, and by more than its length from the prebrachial transrerse vein, which is oblique. Halteres testaceons. Length of the body 4 lines; of the wings 8 lines.
Malacea.
104. Lamprogaster tittata, i.s., mas. Nigra, capite ex parte flavo, antemis fulvis, thorace flavo-hivittato, scutello flaro-marginato, abdominis vittî dorsali flarâ, tarsis albis, alis nigrieantibus basi fasciisque quatuor albidis.
Male. Black, shining. Head pale yellow in front, beneath and about the eyes. Antemnæ tawny. Thorax with two yellow stripes; scutellum with a yellow border. Pectus with an oblique yellow band on each side. Abdomen with a yellow dorsal stripe. Tarsi white, with black tips. Wings blackish, whitish at the base, and with four whitish bands; 1st band irregular ; 2nd and 3rd entire ; 4th interrupted ; veins black ; discal transverse vein straight, upright, parted by about one-fourth of its length from the border, and by much more than its length from the prebrachial transverse vein, which is slightly oblique. Halteres testaceous. Length of the body 3 lines; of the wings 6 lines.
Singapore.
105. Lamprogaster guttata, n. s., fem. Cinerea, capite nigro trimaculato anticè testaceo, antemnis fulvis, thorace cano-quinquevittato, lateribus testaceis, abdominis fasciâ anticâ fulvâ, tarsis albidis, alis snbcinereis fasciis octo subinterruptis fuscis.
Female. Black, with cinereous tomentum. Head partly dull testaceous in front; vertex with three black spots, two in front and one behind. Antemme tamy ; arista pubescent. Thorax with five hoary stripes which are conmected in front by a transserse band ; sides testaceous. Pectus with an oblique dull testaccous stripe on each side. Abdomen with a tamny band on the hind border of the first segment ; oviduct slender, lanceolate. Tarsi whitish, with black tips. Wings greyish, with about eight irregular and partly interrupted brown bands; reins and halteres testaceons; discal transverse vein nearly straight and upright, parted by about one-fourth of its length from the border, and by more than its length from the prebrachial transverse vein. Length of the body 3 lines; of the wings 6 lines.
Singapore.
106. Lamprogaster truncatula, n. s., foem, Nigra robusta, abdominis apice compresso lanceolato, tarsis albis, alis subcinereis lituris transversis fuscescentibus fasciisque duabus nigro-fuscis.
Female. Black, stout, slightly shining. Arista pubescent. Abdomen compressed and lanceolate at the tip. Tarsi white, with black tips. Wings slightly greyish, with several slight transverse brownish marks, and with
two blackish-brown bands ; the 1st broad, basal, not extending beyond half the breadth from the costa; the 2nd narrow, entire, near the 1st; veins black; discal transverse vein straight and upright, parted by one-third of its length from the border, and by very much more than its length from the prebrachial transverse vein. Halteres testaceous. Length of the body $2 \frac{1}{2}$ lines; of the wings 5 lines.

## Singapore.

## Gen. Xingelina, n. g. (Plate I.fig. 3.)

Foem. Corpus latiusculum, parce setosum. Caput antice subdilatatum; facies magna. Antennce breves; articulus $3^{\text {us }}$ longi-conicus; arista longa, gracilis, plumata. Abdomen brevi-oratum, thorace non longius. Pedes breviusculi. Alce mediocriter latæ; venæ rectr.
Female. Body rather broad, with a few bristles. Head somewhat dilated in front; face large. Antemæ short; 3rd joint elongate-conical ; arista long, slender, plumose. Abdomen short-oval, not longer than the thorax. Legs rather short. Wings moderately broad; subcostal vein extending to about one-fornth of the length of the wing ; mediastmal extending a little beyond the subcostal ; radial ending at about seven-eighths of the length ; cubital ending at the tip ; cubital and prebrachial almost parallel beyond the discal transverse vein, which is straight and upright, and parted by very much more than its length from the prebrachial transserse, and by much less than its length from the border.
107. Xangelina basigutta, n. s., fœem. Testacea, scutello fusco, abdomine fulvo, ahis subcinereis guttâ costali nigrâ venis transversis nigro-sublimbatis.
Female. Testaceons. Proboscis partly brownish. Sentellum brown. Abdomen tawny. Wings slightly greyish; vems black; a black dot at the tip of the subcostal rein; transverse veins slightly clonded with black. Length of the body 2 lines; of the wings 4 lines.
Malacea.

## Gen. Platistoma.

108. Platystoma rigida, n. s., mas. Ferrugineo-fisca, capite subtùs albo, antenuis piceis, pectore albido, pedibus nigris, alis nigricantibus albo confertim at interruptè guttatis.
Mate. Ferruginous-brown, tomentose. Mead white behind and beneath, ferruginous and shining in front. Antenne piceous; arista slightly plumose. Pectus whitish. Legs black. Wings blackish, thickly studded with white dots, which disappear at the base and on an undulating band beyond the middle ; reins black. Length of the body 3 lines; of the wings 6 lines.
Singapore.
109. Platystoma stellata, n. s., mas. Cinereo-migra, capite subtùs albido, antennis fulvis, facie abdominis apice pedibusque nigris nitentibus, alis obscurè ciнereis guttis confertis at interruptis limpidis.
Male. Cinereous-black, tomentose. Head shining black in front, whitish behind and bencath. Antennæ tamny. Abdomen shining black at the
tip. Legs black and shining. Wings dark grey, with numerous limpid clots which are comparatively wanting on a blackish-brown stripe along two-thirds of the length of the costa, and on an exterior upright band which is connected with the above stripe. Length of the body 3 lines; of the wings 6 lines.
Malacca.

## Gen. Themara, n. g. (Plate I. fig. 5.)

Mas. Corpus latiusculum, subsetosum. Caput thorace paullo angustins. Antenne epistoma non attingentes ; articulus $3^{\text {us }}$ lanceolatus, longiusculus; arista latè plumosa. Abdomen ellipticum, thorace non longius. Alce latiusculæ, obscuræ, maculis pallidis, venis radiali et cubitali undulatis.
Male. Body rather broad. Head and thorax slightly setose. Head a little less broad than the thorax; epistoma not prominent. Proboscis short. Palpi short, porrect. Antenne not reaching the epistoma; 3rd joint lanceolate, rather long; arista deeply plumose, about twice the length of the 3rd joint. Abdomen elliptical, as long as the thorax. Wings rather broad, dark, with pale marks; subcostal vein ending at much beyond one-third of the length; mediastinal ending at much beyond half the length; radial undulating, ending at about five-sixths of the length; cubital undulating, ending at the tip of the wing; prebrachial and subanal hardly undulating; discal transverse vein straight, nearly upright, parted by one-tenth of its length from the border, and by more than half its length from the preebrachial transverse.
110. Themara ampla, n. s., mas. Ferruginca, subtùs testacea, sentello, abdominis fusei fasciis tribus pedibusque testaceis, alis obscurè fuscis, maculis tribus anticis luridis tribusque posticis albis.
Male. Ferruginous, slightly shining, testaceous beneath. Head in front and appendages testaceous. Scutelhum and legs testaceous. Abdomen brown above, testaceous at the base and with two testaceous bands. Wings dark brown, with three hyaline triangular spots in front and three on the hind border; the costal spots lurid, the hind spots white. Length of the body 4 lines; of the wings 8 lines.
Singapore.

## Gen. Strumeta, n. g. (Plate II. fig. 4.)

Foem. Corpus latiusculum, pubescens, vix setosum. Abdomen brevi-ovatum, thorace latins et paulld longius. Alce mediocriter late, limpidæ, fasciis fuscis, venâ transverŝ̂ prebrachiali undulatâ, perobliquâ.
Female. Body rather broad, dull, pubescent, hardly setose. Head rather less broad than the thorax ; epistoma not prominent. Proboscis and palpi short. Antennæ mutilated in the insect here described. Abdomen short oval, broader and a little longer than the thorax. Wings moderately broad, limpid with brown bands; longitudinal veins almost straight; subcostal and mediastinal veins almost contiguous; mediastinal vein ending at much beyond half the length of the wing; radial ending at a little beyond fourfifths of the length; cubital ending at somewhat in front of the tip; discal
transverse vein nearly straight and upright, parted by full one-fourth of its length from the border, and by about its length from the prebrachial transverse which is undulating and very oblique.
111. Strumeta conformis, n. s., foem. Cervina, thoracis vittis duabus, metathorace et pectoris disco nigricantibus, pedibus testaceis, alis limpidis fuscoquadrifasciatis.
Female. Fawn-colour. Thorax with two blackish stripes. Metathorax and disk of the pectus blackish. Legs and halteres testaceous. Wings limpid, pale brown along the costa, and with four pale brown bands ; 1st and 2 nd bands connected hindward; veins black, testaceous towards the base. Length of the body 4 lines; of the wings 7 lines.
Singapore.

## Gen. Valonia, n. g. (Plate I. fig. 6.)

Foem. Corpus sat angustum, pubescens. Caput auticè subdilatatum. Antenna breviusculæ; articulus $3^{\text {us }}$ longi-conicus; arista pubescens. Abdomen fusiforme, thorace paullò longius. Pedes sat robusti. Alce angustæ, obscuræ, maculis limpidis.
Allied to Platystoma. - Female. Body rather narrow, dull, pubescent. Head as broad as the thorax, slightly dilated in front; epistoma not prominent. Proboscis and palpi short. Antennæ rather short, not reaching the epistoma; 3rd joint elongate-conical ; arista pubescent. Abdomen fusiform, a little longer than the thoras. Legs rather stout, especially the hind pair. Wings narrow, dark with limpid spots; subcostal vein ending at before one-third of the length of the wing; mediastinal ending at much beyond half the length ; radial ending at a little before three-quarters of the length; cubital and subanal hardly undulating, the former ending at a little in front of the tip of the wing ; discal transverse vein straight and upright, parted by less than half its length from the border, and by a little less than its length from the prebrachial transverse.
112. Valonia complicata, n. s., fœm. Obscurè cinerea, capite testaceo, thorace migro-punctato, abdomine guttis quatuor lateralibus albis tomentosis subtùs testaceo, pedibus fulvis, femoribus posterioribus tibuisque posticis nigris, alis subcinereis guttis phurimis limpidis.
Female. Dark grey. Head and appendages testaccous. Thorax punctured with black; lhumeral calli black, shining. Abdomen with two white tomentous dots on each side; underside testaceous. Legs tawny ; posterior femora black, with tawny tips; hind tibie blackish except at the base. Wings greyish, with very numerous limpid dots, blackish and without dots along more than half the length of the costa; veins black. Halteres testaceous. Length of the body 3 lines; of the wings 5 lines.
Malacca.
Gen. Sopimra, n. g. (Plate II. fig. 1.)
Foom. Corpus sat angustum, pubescens. Caput thorace paullò angustins. Antennarum articulus $3^{\text {us }}$ longiusculus, sublanceolatus; arista plumosa.

Abdomen subfusiforme, apice attenuatum, thorace paullò longins. Pedes graciles. Alce longiusculæ, sat angustæ, venis limbatis.
Female. Body rather narrow, dull, pubescent. Head a little less broad than the thorax; epistoma not prominent. Proboscis and palpi short. Antennæ not reaching the epistoma; 3rd joint rather long, sublanceolate; arista plumose. Abdomen subfusiform, somewhat attenuated at the tip, a little longer than the thorax. Legs slender. Wings rather long and narrow; subcostal rein ending at before one-third of the length of the wing; mediastinal ending at much beyond half the length; radial ending at about seveneighths of the length ; cubital ending at very little in front of the tip; discal transverse rein straight, hardly oblique, parted by one-fourth of its length from the border, and by very much more than its length from the probrachial transverse.
This gems seems to be somewhat allicd to the Helomyzides.
113. Sophira ventsta, n. s., fœom. Testacea, thoracis fasciâ metathorace abdominisque fasciis tribus maeulisque duabus subapicalibus nigris, tibiis fuscescentibus, alis limpidis venis fusco-limbatis.
Female. Testaeeous. Thorax with a black band between the wings. Metathorax black. Abdomen with three black bands, and with a black subapical spot on each side. Tibir brownish ; tarsi tawny. Wings limpid, lurid im front, striped with brown along most of the reins; veins black, tawny towards the base; cubital vein minutely setose towards the base. Length of the body 4 lines; of the wings 8 lines.
Singapore.

## Gen. Rioxa, n. g. (Plate II. fig. 3.)

Fom. Corpus angustum, pubescens. Caput sat parrum, thorace multo angustius. Antennarum articulus $3^{\text {us }}$ sublinearis; arista rarò plumosa. Thorax longi. ovatus. Abdomen fusiforme, thorace multò angustius, vix longius. Pedes graciles, antici breves. Alce longæ, medioeriter latæ, obscuræ, guttis albis.
Female. Body narrow, dull, pubescent. Head rather small, much less broad than the thorax ; epistoma not prominent. Proboscis and palpi short. Antennæ not reaching the epistoma; 3rd joint almost linear, moderately long; arista thinly phomosc. Thorax elongate-oval. Abdomen fusiform, much narrower, but hardly longer than the thorax. Legs slender; fore legs short. Wings long, moderately broad, dark with white dots; radial vein ending at rather in front of the tip of the wing ; diseal transverse rein almost straight, very oblique, parted by about one-fourth of its length from the border, and by somerwhat less than its length from the prebrachial transverse.
114. Rroxa lanceolata, u. s., fœm. Cervina, thorace nigro-quadrivittato, abdomine nigro vittâ dorsali cervinâ, pedibus testaceis, alis migricantibus strigâ discali guttisque quinque albis.
Female. Fawn-colour. Proboseis, legs and halteres testaceous. Thorax with two blackish stripes on each side, the outer pair shortened hindward. Abdomen black, with a fawn-eoloured dorsal stripe which is attenuated hindward, and does not extend to the tip. Wings blackish, almost limpid along the hind border for more than half the length from the base, with a white discal streak and with five white dots; 1st dot in a line with the streak; 2nd very minute,
behind the 1st; 3rd on the costa near the tip; 4th larger, apical, near the 5 th, which is on the hind border. Length of the body 5 lines; of the wings 10 lines.
Singapore.

## Gen. Xiria, n. g. (Plate II. fig. 2.)

Mas, Corpus metallicolor, subsetosum. Caput latiuseulum. Palpi longiuseuli. Antennce breves; articulus $3^{\mathrm{us}}$ sublinearis ; arista latè plumosa. Thorax robustus. Abdomen lincare, thorace paullò longius et multò angustius. Pedes longiuseuli, sat validi. Ala mediocriter longæ latreque.
Male. Body metallic, slightly setose. Head rather broad, hardly narrower than the thorax; epistoma not prominent. Proboscis short. Palpi porrect, rather long and stout. Antenmæ short, not nearly reaching the epistoma; 3 rd joint almost linear ; arista deeply plumose, much more than twice the length of the 3rd joint. Thorax stout. Abdomen linear, a little longer than the thorax and about half its breadth. Legs rather long and stout. Wings moderately long and broad; subcostal vein ending at rather beyond one-third of the length; mediastinal ending at very much beyond half the length; radial ending at beyond five-sixths of the length; cubital ending at hardly in front of the tip; discal transverse nearly straight, slightly oblique, parted by about half its length from the border, and by rather more than its length from the preebrachial transverse.
115. Xiria antica, n.s., mas. Purpurea, capite nigro, antennarum articulo $3^{\circ}$ ferrugineo, pedibus testaceis, tibiis nigris, tarsis albis anticis ferrngineis, alis sublimpidis apice nigricantibus maculis costalibus albis et nigricantibus.
Male. Purple. Head and appendages black. Third joint of the antenme ferruginous. Legs testaceous; tibie black; fore tarsi ferruginons; posterior tarsi white, with brown tips. Wings nearly limpid, with two white and two blackish spots on the costa; tips blackish; reins black, testaceous along the costa. Halteres whitish. Length of the body 4 lines; of the wings 8 lines.
Mount Ophir.
Subfam. Aciimdes, Walk.
Gen. Acmias, Fubi.
116. Achias maculipemis, Westiv. Oriental Entomology, 38. pl. 18. f. 4. Singapore. Inlabits also Java.

## Subfam. Diopsides, Walk.

## Gen. Diopsis.

117. Diopsis quinquequttata, n. s., fom. Nigra, proboscide pedibusque fulvis, his ex parte fusceseentibus, alis nigricantibus basi apice guttisque quinque sublimpidis. (Plate II. fig. 7.)
Female. Black, shining. Proboseis tawny. Petioles of the eyes about half the length of the thoras. Scutelhum with two spines, which are more than half the length of the thorax. Legs tawny, partly shaded with brown. Wings blackish, nearly limpid at the base and at the tips, and with two interrupted nearly
limpid bands, the first of two dots, the seeond of three dots; reins black. Length of the body 3 lines; of the wings $4 \frac{1}{2}$ lines.
Mount Ophir.
118. Diopsis quadriguttata, n. s., mas. Picea, capite oeulorum petiolis pedibusque fulvis, lis ex parte fusecsecntibus, alis nigricantibus basi fasciâ subapicali guttisque quatuor sublimpidis. (Plate If. fig. 6.)
Mate. Piceous, shiming. Head and petioles of the eyes tawny, the latter fully half the length of the thorax. Scutellum with two spines, which are less than half the length of the thorax. Legs tawny, slightly shaded with brown. Wings blackish, nearly limpid at the base and towards the tips, except the extreme part of the latter which is slightly blackish; two interrupted nearly limpid bands, each composed of two dots; veins black. Length of the body $2 \frac{1}{2}$ lines; of the wings 4 lines.

## Malacca.

## Subfam. Sepsides, Walk. <br> Gen. Calobata, Fabr.

119. Calobata coneinis, u. s., fœem. Nigra, capite cyaneo, antennis piccis, femoribus posterioribus albo-cinctis, tarsis anticis albis, alis subcinereis fasciis duabus connexis fuscis, $2^{\text {a }}$ apicali.
Female. Black, dull. Head bluc, shining. Proboscis and antemme piccous. Posterior femora with a white ring near the tips; hind femora with a white ring at the base; fore tarsi white. Wings greyish, with two brown bands, the first connceted on the hind border with the sccond, which is apical; reins black. Halteres whitish, with black knobs. Length of the body 7 lines; of the wings 10 lines.

## Singapore and Mount Ophir.

120. Calobata immixta, n. s., fæm. Nigra, capite cyanescente, facialibus atris, antennis piceis, pedibus testaceis anticis nigris, tarsis anticis albis, femoribus posterioribus fasciis quatuor ıigris, alis subcinereis fasciis duabus subconnexis fuscescentibus, $2^{\text {a }}$ apicali.
Female. Black, dull. Head bluish, shining; facialia deep black. Proboscis and antennæ piceous. Legs testaccous; fore femora black, testaccous towards the base ; fore tibie black; fore tarsi white; postcrior femora with fou black bands; posterior tibiæ dull testaceous, black towards the base ; postcrior tarsi brownish. Wings slightly greyish, with two brownish bands, the first slightly connected on the hind border with the second which is apical ; veins black. Length of the body 5 lines; of the wings 10 lines.

## Malacca.

> Subfam. Psilides, Walk.
> Gen. Micropeza, Macq.
121. Micropeza fragilis, u. s. Fulva, femoribus tibiisque anticis fuscis, tiluins posterioribus basi apiceque fuscis, tarsis anticis posticisque albidis, alis subcinercis guttis tribus apiceque limpidis.
Tawny. Fore femora and fore tibiæ brown; posterior tibiæ brownish at the
base and at the tips; fore tarsi and hind tarsi whitish. Wings very slightly greyish, with three limpid spots forming a curved band near the tips which are also limpid; veins black. Length of the body $3 \frac{1}{2}-4$ lines; of the wings 5-6 lines.
Singapore and Mount Ophir.

## Gen. Nerius, Wied.

122. Nerius fuseipennis, Macq. Dipt. Exot. ii. 3. 241. 1. pl. 325. f. 5.

Singapore and Mount Ophir. Inhabits also Java and the Philippine Islands.

## Gen. Texara, n. g. (Plate II. fig. 5.)

Foem. Corpus gracile, non setosum. Caput subproductum; faeies brevis. Antennce epistoma attingentes; articulus $3^{u s}$ clavatus ; arista pubescens, subapicalis. Thorax subfusiformis. Abdomen lanceolatum, thorace angustius et duplò longius. Perles postici longi, femoribus incrassatis serratis, tarsis anticis subdilatatis. Alce angustr.
Female. Body slender, without bristles. Head slightly produced, as broad as the thorax; face short; epistoma not prominent. Antennæ extending to the epistoma; third joint clavate; arista mimutely pubescent, seated near the tip of the third joint. Thorax subfusiform. Abdomen lanceolate, narrower than the thoras and about twice its length. Anterior legs moderately long and stout; fore tarsi slightly dilated; hind legs long; hind femora incrassated, serrated beneath ; hind tibix slightly curved. Wings narrow ; subcostal vein not extending to one-third of the length of the wing; mediastinal rein not extending to half the length; radial extending to a little beyond three-quarters of the length; cubital ending at very little in front of the tip of the wing ; discal transverse vein straight, upright, parted by less than its length from the border, and by about thrice its length from the prebrachial transverse.
123. Texara compressa, n. s., fem. Nigra, capite nigro-cyaneo subtùs cano, antennis piceis, aristâ albidâ, alis subcinereis, halteribus albidis.
Female. Black. Head bluish-black, with hoary tomentum beneath. Antennæ piceons; arista whitish. Wings greyish; reins black. Halteres whitish. Length of the body 5 lines; of the wings 6 lines.
Singapore.

## Description of Plates I. and II.

Obs. All the figures are more or less magnified, and the outline-details comprise the side and front views of the head, antennæ, and base of the wings.

## Plate I.

Fig. 1. Massicyta bicolor; $1 a$, head seen sideways; $1 b$, the head seen in front; $1 c$, antenna.
Fig. 2. Zambesa Ocypteroïdes; $2 a$, head sideways; $2 b$, ditto in front ; $2 c$, antenna.
Fig. 3. Xangelina basigutta; $3 a$, head sideways; $3 b$, ditto in front; $3 c$, antenna; $3 d$, base of the wing.
Fig. 4. Xarnuta leucotelus; $4 a$, head sideways; $4 b$, ditto in front; $4 c$, antenna ; $4 l_{2}$, base of wing.

Fig. 5. Themara ampla ; $5 a$, head sideways; $5 b$, ditto in front ; $5 c$, antenna; $5 d$, base of wing.
Fig. 6. Talonia complicata; $6 a$, head sideways; $6 b$, ditto in front; $6 c$, antenna.

## Plate II.

Fig. 1. Sophira venusta; $1 a$, head sideways ; $1 b$, ditto in front ; $1 c$, antenna.
Fig. 2. Xiria antica; $2 a$, head sideways; $2 b$, ditto in front; $2 c$, antenna.
Fig. 3. Rioxa lanceolata; $3 a$, head sideways ; $3 b$, ditto in front ; $3 c$, autenna.
Fig. 4. Strumeta conformis; $4 a$, head sideways; $4 b$, ditto in front.
Fig. 5. Texara compressa; $5 a$, head sideways; $5 b$, ditto in front; $5 c$, antenna.
Fig. 6. Diopsis 4-guttata.
Fig. 7. Diopsis 5-guttata.

Note on a supposed species of Pelopæus. By Edward Newaran, Esq., F.L.S.

> [Read January 15th, 1856.]

In No. 59 of the "Proceedings" of our Society is a letter addressed to our Secretary on the economy of a certain Hymenopterous insect as observed by the writer when at Bombay: several of the explanations in this letter require correction, although evidently written in good faith. The description of the insect and its nest is fully sufficient to identify the tribe and even genus: it is one of the Vespina, and doubtless of the genus Pelopaus: the name of "Mason-bee" is therefore assigned to it in error, because there is a tribe of Mason-bees possessing a most wonderful and interesting economy, and with that tribe the present insect has nothing whatever to do.

In the second place, the male is represented as the builder of the nest,-a statement so opposed to all we know of the economy of Hymenoptera, that it may safely be pronounced erroneous; the building insect was certainly not a male, and as certainly a female or neuter.

In the third place, the shining green insect, described as the female, was unquestionably a parasite, probably of the genus Chrysis: its presence in the nest of the wasp was as an insidious enemy, not as the legitimate partner and participator in domestic care.
 $\int^{2}$



